

Frequently Asked Questions about Bridges

My 1st grader gets no math homework assigned. Is this normal with Bridges?

Homework has more to do with teacher philosophy than Bridges. Some teachers believe in assigning homework for practice while other teachers feel that their students get enough practice during the school day without the need to assign homework. With that being said, teachers do assign Home Connections and/or Practice workbook sheets to allow students to practice the skills they are learning in the classroom. However, there is no "daily" homework.

How can the information taught be communicated to parents since it is so different?

The Home Connections that you see coming home often reinforce the way content is taught in the classroom. The more you work with your child on these Home Connections the more you will understand how the program introduces concepts through inquiry.

Can you show the website and how to navigate it?

The website for Bridges is www.themathlearningcenter.org. There are also directions for navigating this website on the FPS website.

Did you say the curriculum will change again and/or will Bridges change?

Yes. The state of Michigan has adopted the Common Core State Standards, which are standards that 44 states across the country have adopted. One of the advantages to Bridges is that it already aligns to the Common Core State Standards, therefore Bridges will not change.

Would Bridges be better used as a supplemental curriculum?

No. Because Bridges is an inquiry-based math program that incorporates math discourse (Discussion about math concepts), it takes time. While this time allows for depth and understanding of mathematical concepts, it would not be well suited as a supplemental program.

Are there supplemental worksheets that can be used as homework by teachers?

Yes. Bridges has both Practice Worksheets and Home Connections that teachers could use as homework practice.

Does Bridges use periodic assessments?

Yes. The Bridges Program includes does include assessments.

Does the district have data yet on whether or not Bridges is working?

A: No. We do not have data yet on the success of Bridges in Farmington. We only have data about the success of the program in other districts.

While this may be a valuable tool at upper levels, what success has been shown at the elementary level?

Bridges is used at the elementary level in various districts across many states. The Bridges website, www.mathlearningcenter.org, highlights many of these districts and shows the success that these districts are having with the Bridges math program. In addition, the Bridges

philosophy of mathematics instruction mirrors the new Common Core State Standards for mathematics that have been adopted by 44 of the 50 states, including Michigan.

Through what grade is Bridges being taught?

Kindergarten through 5th grade

Are the kids able to make the transition from Bridges to a more traditional math program?

Yes, since Bridges uses visual models to introduce mathematical concepts this helps students to understand the mathematics and be able to apply the more traditional mathematical rules (algorithms). Bridges also teaches the use of these rules just like in traditional math programs. The philosophy behind Bridges is for students to better understand the rules that are used in traditional math programs by creating an understanding of the concepts then having students develop the rule themselves. In addition, the inquiry approach used in Bridges better prepares students for the Connected Math Project 2 resource used in the Middle Schools.

How do the teachers extend the lessons for the students who have mastered the current concept?

There are many different ways for a teacher to differentiate for those students that have mastered the current concept. One of these ways is to have students represent their answer in a different way. Bridges asks for students to do problems by drawing pictures, writing in words, or doing a number sentence. In addition, Bridges teaches many different strategies for solving the same type of problem. By asking students to solve the problem using a different method or strategy teachers are allowing students to have a deeper understanding of the concept. Another way for teachers to meet the needs of students that have mastered current concepts is to have them look for patterns, rules, exception to rules, all possible outcomes, etc. for the concept being taught. Finally, the questions that teachers ask students can help students to dig deeper into the concepts that they are learning.

How consistent is the use of Bridges across the district?

Bridges is being used exclusively in all classrooms Kindergarten through Grade 5

Are there textbooks for students to bring home?

No, there are no student textbooks.

Are there practice text books on Bridges that can be used for summer support?

No, however, students all received their own copy of a Number Corner student book. In grade 3, students also received their own copy of a student workplace book. In grades 4 & 5 students received their own copy of the Bridges student work books. These books can be brought home and any pages not completed could be done or practiced over the summer. In addition, the Bridges website has practice book pages for each grade level, home connections and online websites for basic skill practice.

Is there any memorization in this program?

Yes, students are still expected to memorize and be fluent with their basic skills. In addition to memorization, Bridges uses other strategies that students can use to have quick recall of basic skills.

How are children evaluated/how is a child's progress measured?

Students are evaluated through the use of many different methods. Some of which are: dialog, observations, student work samples, Bridges assessments, and district created common assessments. These assessments will be used by teachers to mark report cards and have parent conferences.

Are students still going to be allowed to move up a grade in math?

The district will continue to identify students who qualify for advancement in math.

What do you do for a child who did well with the traditional model but is not catching on to Bridges?

Students that are successful with the traditional model are able to memorize rules and successfully follow them. If students are struggling with the "Bridges way of teaching", then they do not understand conceptually what the rules mean. Teachers will continue to work with students that struggle, helping them to make the necessary connections using the visual models, manipulatives, etc. In addition, the spiraling nature of the Bridges resource allows for students to continue revisiting concepts giving them additional opportunities to strengthen their understanding.

Where did this way of teaching come from?

This program came from a grant that was funded by the National Science Foundation to improve mathematics instruction. The National Council of Teachers of Mathematics developed their Principles and Standards for School Mathematics which also supports this way of teaching. In addition, Jerome Bruner and Robert Marzano both did research that supports the effectiveness of this type of mathematics instruction.

What year was Bridges first taught in a classroom?

Grade 2 Bridges was the first grade level to be finished. It was completed and ready as the full curriculum in 1999. But parts of Bridges K-2 were being used in classrooms all over before it was completed. Box It, Opening Eyes and Visual Math were all precursors to Bridges and those programs have been around since the late 1980s. You can also find further information on the Math Learning Centers website in the Family Support section of the website:

www.gotomlc.org/resources/families There are sections for *Curriculum Origins & Philosophy*, *Curriculum Details* and *About the Math*.

How can I help my child with math at home?

- The most common way for you to help your child at home is to ask them to show you what they have been learning and how they are doing it. Celebrate that they may be doing the math differently than you but still getting the same answer. When this happens ask them to tell you why their way of solving the problem worked and if they can make any connections to the way you solved it.
- Make sure that when you are talking with your child about math you are asking them open ended questions like "What did you notice..." , "How do you know that..." , "Why?", etc. Let them do the talking and you ask the questions. Don't do the work for them!

- Use the Math Learning Center Website link for Parent Support. The websites for your child's grade has very interactive games that model the Bridges curriculum that will help both you and your child become more proficient with the concepts.
www.mathlearningcenter.org
- Play strategy games with your child. This helps them to develop good problem solving skills as well as the ability to stick with a problem when they are having difficulty. (Set, Sequence, Chess, Backgammon, etc.)